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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,185	10/12/2003	Felix Rodriguez	JDN 0301	2582

7590 01/04/2007

Aqua Maker LLC
10627 Kinghurst Drive
Houston, TX 77099

EXAMINER	
CINTINS, IVARS C	
ART UNIT	PAPER NUMBER
1724	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/684,185	RODRIGUEZ, FELIX	
	Examiner	Art Unit	
	Ivars C. Cintins	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagiwara et al. (U.S. Patent No. 4,525,410; hereinafter "Hagiwara"). Hagiwara discloses a composition comprising a natural zeolite, such as clinoptilolite (see col. 3, line 21), and hydrated zinc sulfate (see col. 13, line 67); and further discloses preparing this composition by contacting the zeolite with an aqueous solution of zinc sulfate, washing the resultant product by water, and then drying the washed product at an elevated temperature (see col. 13, line 61 through col. 14, line 6). Accordingly, the reference material is deemed to be a "hydrothermal ion exchange activated zeolite" as now recited in the claims of this application. Furthermore, since Applicant has not clearly defined what constitutes hydrothermal activation, and has not demonstrated that contacting zeolite with a slightly warm aqueous solution of the recited zinc compounds will produce a product that is materially different from that of the reference, this reference product is deemed to be indistinguishable from the recited "hydrothermal ion exchange activated zeolite."

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara in view of Cooper et al. (U.S. Patent No. 5,601,798; hereinafter "Cooper"). Should it be held that the zeolite product of Hagiwara does not constitute a "hydrothermal ion exchange activated zeolite," then this primary reference discloses the claimed invention with this sole exception. Cooper teaches that it is known to increase the mesopores volume of zeolite by hydrothermal treatment (see col. 2, lines 53-63). Since increasing the pore volume of the zeolite of Hagiwara would obviously be desirable, in order to increase the surface area available for metal ion retention, it would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the zeolite of this primary reference to the hydrothermal treatment disclosed by the secondary reference.

Applicant's arguments filed November 3, 2006, 2006 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that Hagiwara does not disclose a hydrothermal ion exchange activated zeolite. It is pointed out, however, that since the zeolite of this reference is activated by a combination of aqueous solution and heat treatments (see col. 13, line 61 through col. 14, line 6), this zeolite is deemed to be a "hydrothermal ion exchange activated zeolite." It is further pointed out that since Applicant has not demonstrated that all hydrothermal ion exchange treatments will produce a product different from that of Hagiwara, the product-by-process type recitation in claim 30 is not deemed to distinguish over the reference product. Applicant should note that for product-by-process claims determination of patentability is based on the product itself. The patentability of a

product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP § 2113.

Furthermore, even if Applicant can demonstrate that hydrothermal ion exchange treatments will produce a zeolite that is materially different from that of Hagiwara, claims 30-33 would still be unpatentable over Hagiwara in view of Cooper, for the reasons given above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ivars Cintins

Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
December 28, 2006